Fall 2009 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

| ST0007 | Overall LMA | Total LMA | | | | |
|--|------------------------|---------------------|--------------|-------------|----------|----------|
| Sacramento Maintenance Yard Putah | Rating | Miles | | | | |
| Creek | A | 16.29 | | | | |
| STOCK | | 10.23 | | | Encroad | chments |
| Rated Item | M Miles | U Miles | M + 4U Miles | Threshold % | PO Miles | |
| Trim / Thin Trees | 0.11 | | 0.11 | 0.68% | | |
| Encroachments | 0.01 | | 0.01 | 0.06% | 3.08 | |
| Animal Control | 0.06 | | 0.06 | 0.37% | | |
| Erosion / Bank Caving | 0.02 | | 0.02 | 0.12% | | |
| LMA Totals: | 0.20 | 0.00 | 0.20 | 1.23% | 3.08 | 0.00 |
| Unit No. 01 Putah Creek or North Levee | Overall Unit Rating | Total Unit Miles | | | | |
| | Α | 8.99 | | | | |
| | | | | | Encroad | |
| Rated Item | M Miles | U Miles | M + 4U Miles | Threshold % | PO Miles | CO Miles |
| Encroachments | 0.01 | | 0.01 | 0.11% | 2.44 | |
| Unit Totals: | 0.01 | 0.00 | 0.01 | 0.11% | 2.44 | 0.00 |
| Unit No. 02 Putah Creek or South Levee | Overall Unit Rating | Total Unit Miles | | | | |
| | A | 7.30 | | | | |
| | | | | | Encroad | |
| Rated Item | M Miles | U Miles | M + 4U Miles | Threshold % | PO Miles | CO Miles |
| Trim / Thin Trees | 0.11 | | 0.11 | 1.51% | | |
| Encroachments | | | | | 0.64 | |
| Animal Control | 0.06 | | 0.06 | 0.82% | | |
| Erosion / Bank Caving | 0.02 | | 0.02 | 0.27% | | |
| | | 0.00 | | 2.60% | | 0.00 |

LMA District Cover Sheet

Fall 2009 Levee Inspection Results

Sacramento Maintenance Yard Putah Creek

| | Spring (March - May) | Summer ** (June - August) | Fall (September - November) | Winter ** (December - February) | | | | | |
|---|-------------------------|------------------------------|--------------------------------|---------------------------------|--|--|--|--|--|
| * Overall LMA Rating (Fall Only) | | | A | | | | | | |
| | ** Non-receipt of Su | mmer or Winter Inspe | ection Reports may effec | ct overall annual rating | | | | | |
| * SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall. FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. | | | | | | | | | |
| omments | | | | | | | | | |
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Unit Cover Sheet

Fall 2009 Levee Inspection Results

Sacramento Maintenance Yard Putah Creek

| | Bank | Unit Miles | | | | | | | | |
|--|--|---|---|-----------------------|---------------------------|--|--|--|--|--|
| | Left | 8.99 | | | | | | | | |
| | Spring (March - May) | Summer (June - August) | (September - November) Fall | | Winter ber - February) | | | | | |
| Unit Maintenance Rating (Fall Only) | | | A | | | | | | | |
| Date of Inspection | 3/12/2009 | | 9/24/2009 | | | | | | | |
| DWR Inspector | Herman Phillips | | Herman Phillips | | | | | | | |
| Accompanied By | | | | | | | | | | |
| project components conditions other tha deficiencies identifie | vinter (or summer) inspection p identified in the attached Leve n the results of our normal mai ed in the enclosed report. vinter (or summer) inspection p | e Inspection Report by intenance and the corre | Mile. We have found no changections we have made to main | ges in flo tenance | od project | | | | | |
| project components maintenance and th following changes ir (In the comment se | identified in the attached Leve le corrections we have made to a flood project conditions. ction below or on additional sho n (Land Side, Water Side, or C | e Inspection Report by maintenance deficiend eet(s), identify change of | Mile. In addition to the results cies identified in the report, we of condition by: Start to End Le | of our no have fou | ormal and the | | | | | |
| Comments | | | | | | | | | | |
| information must also be | 3 | eet should be signed ar | nd dated by the LMA Represent ch 31 (Winter Inspection). Pleast spection Reports Room LL-30 | itative an | d returned to | | | | | |
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| x | | | | | | | | | | |
| Signature of LMA Repres | sentative | | Date | | | | | | | |

Page 1 of 2

Flood Control Project Maintenance Levee Inspections

Levee Inspection Report By Mile - Fall 2009

Sacramento Maintenance Yard Putah Creek

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|--|------|------------|--------------------------|--------------------|
| Unit No. 01 Putah Creek or North Levee | Left | 8.99 | 10/16/2009 10/16/2009 | Herman Phillips |

| LMR | Levee | evee Mile | | togon, Itom | | 1 | A - 15 - 17 (O - 17 - 17 - 17) | GPS Latitud | Issue No. | |
|-----|-------|-----------|------------------|---------------|-------------|--------------------|---------------------------------|------------------------------|------------------------------|---------|
| No. | Start | End | Category | Item | Location ** | | Action/Comment | Start | End | Photo |
| 1 | 0.27 | 0.34 | Earthen Levee | Encroachments | LS PO | Landscaping | | 38.520305 ° -121.633168 ° | 38.520000 ° -121.634358 ° | 2 |
| 2 | 0.29 | 0.29 | Earthen Levee | Encroachments | LS PO | Buildings | | 38.520177 ° -121.633528 ° | 38.520177 ° -121.633530 ° | 3 |
| 3 | 0.60 | 1.16 | Earthen Levee | Encroachments | LS PO | Agricultural Ditch | | 38.519632 ° -121.639083 ° | 38.517177 ° -121.648702 ° | 11 |
| 4 | 1.23 | 1.23 | Earthen Levee | Encroachments | LS N | Equipment | | 38.516752 ° -121.649758 ° | 38.516752 ° -121.649758 ° | 4 |
| 5 | 1.55 | 2.72 | Earthen Levee | Encroachments | LS PO | Agricultural Ditch | | 38.515288 ° -121.655077 ° | 38.517438 ° -121.676068 ° | 13 Y |
| 6 | 5.43 | 5.49 | Earthen Levee | Encroachments | WS C | Crops | | 38.518120 ° -121.723325 ° | 38.518137 ° -121.724433 ° | 14 |
| 7 | 5.79 | 5.89 | Earthen Levee | Encroachments | WS PO | Crops | | 38.518305 ° -121.729815 ° | 38.518420 ° -121.731763 ° | 15 |
| 8 | 6.76 | 6.93 | Earthen Levee | Encroachments | LS PO | Fences | | 38.517635 ° -121.747220 ° | 38.517675 ° -121.750247 ° | 5 |
| 9 | 7.03 | 7.07 | Earthen Levee | Encroachments | LS PO | Fences | | 38.517565 ° -121.751940 ° | 38.517600 ° -121.752697 ° | 17 |
| 10 | 7.03 | 7.07 | Earthen Levee | Encroachments | LS C | Landscaping | | 38.517563 ° -121.751980 ° | 38.517582 ° -121.752762 ° | 8 |
| 11 | 8.50 | 8.82 | Earthen Levee | Encroachments | LS PO | Fences | | 38.521580 ° -121.777172 ° | 38.523932 ° -121.782100 ° | 20 |

* Location

LS: Land Side

WS: Water Side

CR: Crown

** Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

PO : Partially Obstructing CO : Completely Obstructing N : Not Inspected

C : Corrected

Levee Inspection Report By Mile - Fall 2009

Sacramento Maintenance Yard Putah Creek

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|--|------|------------|--------------------------|--------------------|
| Unit No. 01 Putah Creek or North Levee | Left | 8.99 | 10/16/2009 10/16/2009 | Herman Phillips |

| 5 |
|--|
| 1.55 |
| 2.72 |
| Land Side |
| Earthen Levee |
| Encroachments |
| in the 10-foot easement ation for several years. |
| |

phillips_20091216_31.jpg

| Levee Mile Report Line | 5 | | | | | | | |
|--|---------------|--|--|--|--|--|--|--|
| Start Levee Mile | 1.55 | | | | | | | |
| End Levee Mile | 2.72 | | | | | | | |
| Location | Land Side | | | | | | | |
| Category | Earthen Levee | | | | | | | |
| Item | Encroachments | | | | | | | |
| Another view of ditch looking downstream landward. | | | | | | | | |

phillips_20091216_32.jpg





Unit Cover Sheet

Fall 2009 Levee Inspection Results

Sacramento Maintenance Yard Putah Creek

| | Bank | Unit Miles | | | | | | | | | |
|--|---------------------------------|-------------------------|--|------------|---------------|--|--|--|--|--|--|
| | Right | 7.30 | | | | | | | | | |
| | Winter (December - February) | | | | | | | | | | |
| Unit Maintenance Rating (Fall Only) | | | Α | | | | | | | | |
| Date of Inspection | 3/12/2009 | | 9/24/2009 | | | | | | | | |
| DWR Inspector | Herman Phillips | | Herman Phillips | | | | | | | | |
| Accompanied By | | | | | | | | | | | |
| Check one: During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. We have found no changes in flood project conditions other than the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the enclosed report. During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. In addition to the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the report, we have found the following changes in flood project conditions. (In the comment section below or on additional sheet(s), identify change of condition by: Start to End Levee Mile or GPS coordinates, location (Land Side, Water Side, or Crown), Item identification, and description of the current condition). | | | | | | | | | | | |
| Comments | | | | | | | | | | | |
| One of the boxes above is information must also be | 3 | eet should be signed an | d dated by the LMA Representh 31 (Winter Inspection). Pleaspection Reports , Room LL-30 | itative an | d returned to | | | | | | |
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| x | | | | | | | | | | | |
| Signature of LMA Repres | sentative | | Date | | | | | | | | |

Levee Inspection Report By Mile - Fall 2009

Sacramento Maintenance Yard Putah Creek

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|--|-------|------------|--------------------------|--------------------|
| Unit No. 02 Putah Creek or South Levee | Right | 7.30 | 10/16/2009 10/16/2009 | Herman Phillips |

| LMR | Levee | Mile | Category | Item | Location | Action/Comment | GPS Latitude/Longit | tude | Issue No. |
|-----|-------|------|------------------|--------------------------|----------|---|--|------|--------------|
| No. | Start | End | Category | item | tion | Action/Comment | Start End | | Photo |
| 1 | 0.00 | 0.28 | Earthen Levee | Encroachments | WS PC | Agricultural Ditch | 38.504930 ° 38.5086 -121.663150 ° -121.6632 | | 24 |
| 2 | 0.17 | 0.31 | Earthen Levee | Encroachments | LS PC | Agricultural Ditch | 38.507113 ° 38.5089 -121.662687 ° -121.6634 | | 3 |
| 3 | 0.20 | 0.30 | Earthen Levee | Encroachments | WS PC | Agricultural Ditch | 38.507410 ° 38.5087 -121.662727 ° -121.6632 | | 26 |
| 4 | 1.09 | 1.10 | Earthen Levee | Erosion / Bank Caving | WS M | Note and monitor erosion site. Inspector Comments: This location erosion site has been partially repaired by the land owner however there is some controversial issues here between the Maintenance yard and owner as to who is responsible for repairs. PICTURES and a report has been taken on this site. | 38.511645 ° 38.5116 -121.676747 ° -121.6767 | | 27 Y |
| 5 | 2.10 | 2.13 | Earthen Levee | Animal Control | LS M | No rodents visible, but rodent burrows visible; need to backfill and compact or grout borrows. | 38.515348 ° 38.515 -121.694042 ° -121.694 | | 22 |
| 6 | 2.10 | 2.13 | Earthen Levee | Animal Control | WS M | No rodents visible, but rodent burrows visible; need to backfill and compact or grout borrows. | 38.515350 ° 38.515 -121.694110 ° -121.694 | | 23 |
| 7 | 5.89 | 6.08 | Earthen Levee | Animal Control | LS C | No rodents visible, but rodent burrows visible; need to backfill and compact or grout borrows. | 38.516072 ° 38.5166 -121.760790 ° -121.7640 | | 5 |
| 8 | 5.93 | 5.95 | Earthen Levee | Encroachments | LS C | Agricultural Ditch | 38.516680 ° 38.5166 -121.764310 ° -121.765 | | 25 |
| 9 | 6.42 | 6.42 | Earthen Levee | Erosion / Bank Caving | LS M | Note and monitor erosion site. | 38.517417 ° 38.5174 -121.769950 ° -121.7699 | | 28 |
| 10 | 6.59 | 6.65 | Earthen Levee | Encroachments | WS PC | Crops | 38.518088 ° 38.5180 -121.772947 ° -121.7739 | | 6 |
| 11 | 6.64 | 6.66 | Earthen Levee | Trim / Thin Trees | WS M | Trim trees to at least five feet above ground level. | 38.518270 ° 38.5183 -121.773698 ° -121.7736 | | 29 |
| 12 | 6.70 | 6.72 | Earthen Levee | Trim / Thin Trees | LS M | Trim trees to at least five feet above ground level. | 38.518622 ° 38.5187 -121.774525 ° -121.774 | | 30 |
| 13 | 6.76 | 6.82 | Earthen Levee | Trim / Thin Trees | LS M | Trim trees to at least five feet above ground level. | 38.519022 ° 38.5199 -121.775298 ° -121.7762 | | 31 |
| 14 | 7.16 | 7.16 | Earthen Levee | Trim / Thin Trees | WS M | Trim trees to at least five feet above ground level. | 38.522242 ° 38.5222 -121.781460 ° -121.7814 | | 32 |
| 15 | 7.24 | 7.30 | Earthen Levee | Encroachments | WS PC | Crops | 38.522752 ° 38.5226 -121.782912 ° -121.784 | | 13 |

* Location

LS : Land Side

WS : Water Side

CR : Crown

** Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

PO : Partially Obstructing CO : Completely Obstructing N : Not Inspected

C : Corrected

Levee Inspection Report By Mile - Fall 2009

Sacramento Maintenance Yard Putah Creek

| Waterway | Bank | Unit Miles | Inspection Start/End | Inspector |
|--|-------|------------|--------------------------|--------------------|
| Unit No. 02 Putah Creek or South Levee | Right | 7.30 | 10/16/2009 10/16/2009 | Herman Phillips |

| Levee Mile Report Line | 4 |
|---|-----------------------|
| Start Levee Mile | 1.09 |
| End Levee Mile | 1.10 |
| Location | Water Side |
| Category | Earthen Levee |
| Item | Erosion / Bank Caving |
| Photo shows partial repair of slope damage. | |
| phillips_20091216_28.jpg | |

| Levee Mile Report Line | 4 |
|---|-----------------------|
| Start Levee Mile | 1.09 |
| End Levee Mile | 1.10 |
| Location | Water Side |
| Category | Earthen Levee |
| Item | Erosion / Bank Caving |
| slone damage some renairs made. Proper renair | |

slope damage some repairs made. Proper repair need to be done at this site with compaction test to verify compaction.

phillips_20091216_29.jpg

| Levee Mile Report Line | 4 | |
|---|-----------------------|--|
| Start Levee Mile | 1.09 | |
| End Levee Mile | 1.10 | |
| Location | Water Side | |
| Category | Earthen Levee | |
| Item | Erosion / Bank Caving | |
| Another view standing on toe of slope looling upstream. | | |
| phillips_20091216_30.jpg | | |







PO : Partially Obstructing CO : Completely Obstructing N : Not Inspected

C : Corrected